

THE CALIFORNIA ROAD CHARGE TECHNICAL ADVISORY COMMITTEE

Pursuant to SB 1077 (DeSaulnier, Chapter 835, Statutes of 2014) the Commission created a Road Charge Technical Advisory Committee in consultation with the Secretary of the Transportation Agency to study road charge alternatives to the gas tax and make recommendations to the Secretary of the Transportation Agency on the design of a pilot program and the criteria to be used to evaluate the pilot program. The 15-member Technical Advisory Committee established by the Commission includes membership that represents the following technical and public interest areas:

- Telecommunications;
- Highway user groups;
- Data security and privacy;
- Privacy rights advocacy organizations;
- The social equity community;
- Regional transportation agencies;
- National research and policymaking bodies (including members of the Legislature); and
- Other relevant stakeholders.

In December 2015, the Technical Advisory Committee adopted its Road Charge Pilot Design and Evaluation Criteria Recommendations to provide direction for the development of the pilot program. Caltrans designed the pilot program consistent with the Committee's recommendations. The pilot program ran for nine months from July 2016 to March 2017, during which time the Road Charge Technical Advisory Committee received regular updates. By the end of the program, over 5,000 vehicles were enrolled, and 37 million miles were reported.

Following the completion of the pilot program, the California State Transportation Agency released a final report in December 2017. This final report provided an overview of the pilot program and identified next steps regarding further study of a road charge. The full 2017 Road Charge Pilot Program Final Report is available through this link: www.californiaroadchargepilot.com/final-report.

The Transportation Agency's final report was considered by the Technical Advisory Committee for purposes of advising the Commission. By many measures, the Technical Advisory Committee and the Commission see the Road Charge Pilot Program as a success. The pilot program demonstrated a possible long-term alternative to the per-gallon fuel tax which can create stability and ensure longevity for California's transportation revenues. In addition to considering the Transportation Agency's final report, the Technical Advisory Committee also heard from subject matter experts this past year regarding the feasibility of possible implementation of a road charge for zero-emission, commercial and state government vehicles; and methods for administering a road charge program.

Transportation funding in California has changed dramatically since the Road Charge Technical Advisory Committee was created in 2014. SB 1 provided the state with a much-needed increase in funding for

transportation infrastructure and lessened the need, in the short-term, to find alternatives to the gas tax. However, in the coming years, it will be important that the Legislature look beyond the next decade toward a future when reliance on gasoline and diesel fuels for transportation will decline dramatically. As required by SB 1077, the Commission developed the below recommendations. As California moves away from a reliance on gasoline powered cars, there will be a need for the Legislature to consider a more equitable and sustainable source of transportation funding in lieu of the current per-gallon fuel tax. When that time comes, the Legislature should consider the following recommendations:

Direct the California State Transportation Agency to lead and develop a program ~~that would identify and possibly provide the equipment and software necessary~~ to implement a mandatory per mile road charge requirement for state government vehicles, autonomous vehicles, shared mobility, and zero-emission vehicles; and a phased-in voluntary road charge program for commercial vehicles. The road charge would replace existing per gallon fuel charges, or zero-emission vehicle registration fees, for participating vehicles.

The California State Transportation Agency along with other state agencies should be required to work with relevant stakeholder groups through a public process to develop a mandatory road charge program for all government vehicles, shared mobility, autonomous vehicles, and zero-emission vehicles as well as a phased-in voluntary road charge program for commercial vehicles. This program would also include the identification of any equipment, on-board telematics and software necessary for implementation. The intent of ~~this~~these programs would be to replace the existing per gallon fuel charges, or zero-emission vehicle registration fees with a per mile road charge for participating vehicles. The Legislature should provide authority for the state to collect revenue by mile at a rate equivalent to the current fuel excise tax rate. Through communication and coordination with other states and the federal government, the California State Transportation Agency should develop a proposed strategy to address how federal fuel taxes could be incorporated into a per mile road charge program.-

The benefit of continued advancement of a road charge program will increase over time, especially in the latter half of the next decade as the fuel efficiency and the number of zero-emission vehicles will increase dramatically. Prior to any implementation of a road charge program, the California State Transportation Agency would need to ensure that critical policy issues have been addressed. These policy issues include but are not limited to: the specific per mile fee and assurances that the road charge funds will replace existing per gallon fuel charges and be solely dedicated for transportation and that the funding will be used in the same manner as existing fuel taxes.

The California State Transportation Agency should also begin efforts to plan for the implementation of a per mile road charge program. It is important that the Agency begin work on systems capable of supporting the implementation of a road charge program. Any systems

[must have the data capabilities and personal privacy protocols identified for further development or implementation of a road charge.](#) Finally, the Legislature should require an annual report from the California State Transportation Agency on the progress of implementing a [per mile](#) road charge program.

Additional considerations for this recommendation include:

- [The road charge program may be administered by a private contractor and the California State Transportation Agency should ensure that contracts for public-private partnerships shall have an open market for certification to administer road charge accounts.](#)
- [The road charge program should be coordinated with other departments within the California State Transportation Agency including the Department of Motor Vehicles, the California Highway Patrol and the California Department of Transportation \(Caltrans\). This may include but not limited to monthly billing from the DMV including both vehicle registration and per-mile road charge fees.](#)
- Private account administrators may offer extra value-added services, including subscription services. The odometer reading and revenue collection will be included as a base service, covered by the program, and will not be an additional cost to the customer.
- [Provide that the state will receive the minimum driver/vehicle information necessary to collect revenue and provide for enforcement. This information may be limited to Vehicle Identification Number, odometer, payment status, as determined by the California State Transportation Agency.](#)
- [Work with the California Air Resources Board within their authority to implement State of California GHG reduction goals as part of a per mile road charge program](#)
- Ensure driver privacy, incorporating recommendations regarding managing public and private access (including law enforcement), to data collected and stored for purposes of the road charge to ensure individual privacy rights are protected pursuant to Section 1 of Article I of the California Constitution. In addition, any collection and storage systems must conform to current requirements for cybersecurity and safety such as those outlined in the National Institute of Standards and Technology.

Assess the need for requiring all new vehicles registered for personal or commercial use in California to be equipped with telematics capable of transmitting vehicle information, including the current odometer reading necessary to institute a road charge program.

The Commission recommends that the Legislature direct the California State Transportation Agency to assess the need for and define a timeframe to establish data standards in consultation with vehicle manufacturers, as well as data security and privacy rights experts, and

relevant stakeholder groups to ensure that all new vehicles are equipped with the necessary telematics to implement a road charge in the future.

One of the larger barriers to future implementation of a road charge will be the need to standardize the data stream that is produced by all vehicle manufacturers. The Legislature should require state agencies to work with the automotive industry to develop and adopt standard equipment and data formats which can be used across jurisdictions and in an open-source system of public-private partnerships. Requiring the use of this equipment will prepare all vehicles for implementation and create a platform for developing data standardization.

~~Encourage the Department of Motor Vehicles to upgrade its computer systems to enable the recording of vehicle odometer readings, and tax compliance for all registered vehicles. Ensure security measures to address personal privacy concerns are a requirement for any computer system upgrade.~~

~~The Department of Motor Vehicles is presently dealing with several challenges associated with their existing information technology systems. As these challenges are addressed, it is important that they begin working to put systems in place that are capable of supporting the implementation of a road charge program. Any systems must have the data capabilities and personal privacy protocols identified for further development or implementation of a road charge.~~

The California State Transportation Agency should build upon prior research from the 2017 California Road Charge Pilot Program and work with the University of California to conduct an evaluation of the potential impacts to disadvantaged communities resulting from a transition to a per mile road charge program.

In partnership with the University of California, the California State Transportation Agency should conduct an evaluation of the potential impacts to disadvantaged communities resulting from a transition to a per mile road charge program and seek input from stakeholders knowledgeable in this area. This evaluation would assist the Legislature to determine if a potential road charge program would have a positive, negative, or no direct impact to disadvantaged communities.

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